1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

or chest of the water carrier.[1] When the pitcher has been filled with water, its mouth is closed with a stopper of grass or leaves.

The cooking pots, which consist of burnt clay (figs. 125 and 126), are also used for roasting various vegetables. Pots of this kind from the Choroti are sometimes given wart-like decorations. These are either placed in rows some distance apart from each other (fig. 125) or in rows close together (fig. 126). This manner of ornamenting clay pots is of extreme antiquity in the New World, and occurs on grave finds right up through North America.[2] The little protuberances on the pot in fig. 125 have been produced in a different way to those on the handleless pot in fig. 126. On the case of the former, they consist of small clay pellets which have been stuck on the pot before burning, whilst the protuberances on the latter probably have been pressed up out of the wet clay by the potters fingers.

Fig. 125. Cooking and roasting pot of earthenware burnt black. Choroti. Gran Chaco. Bolivia. 1/2. Riksm. 03. 3. 150.

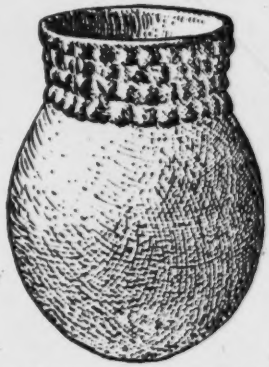

Fig. 126. Cooking and roasting pot of earthenware burnt black. Choroti. Gran Chaco. Bolivia. 1/2. Riksm. 10. 3. 54.

All pottery is made by women. The clay is mixed with powdered potsherds, then well kneaded and formed with the hands into rolls, as thick as a finger, with which the pot is built up.[3] When this has been completed as to its shape, its surface is polished by means of a mussel shell or a

[1] Water-drawing and carrying is exclusively a work for women.

[2] See, for example, Holmes (1), pl. XI, fig. g, and Moore (8), fig. 42.

[3] Cf. figs. 217 and p. 214. On the subject of Indian pottery-making; see for example Holmes (1), and Nordenskiöld (19).

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

323 [531] smooth wooden stick, and, if desired, the above mentioned wart-like ornaments are then put on. Painted clay vessels are not found among the Choroti.

415 531 For holding water, beer, and other fluids, the Choroti use not only clay vessels but also calabash bottles. Small calabash bottles (figs. 127 and 128) are used for keeping toilet articles, such as colour seeds, beads, and other things. Such articles are also kept in boxes of calabash (fig. 129). Flour is kept in large calabash boxes (fig. 130). Of calabash shell are also made bowls or dippers (fig. 131), and spoons (fig. 132).

Fig. 127. Calabash bottle with incised ornament. Choroti. Gran Chaco. Bolivia. 2/3. Rikom. 03. 3. 172.

Fig. 128. Calabash bottle inlaid with turquoise coloured glass beads. Choroti. Gran Chaco. Bolivia. 1/2. Rikom. 03. 3. 175.

Fig. 129. Calabash box, inlaid with glass beads, and with carved ornament. Choroti. Gran Chaco. Bolivia. 2/3. Rikom. 03. 3. 67.

Fig. 130. Calabash box with carved ornament. Choroti. Gran Chaco. Bolivia. 1/3. Rikom. 03. 3. 176.

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as graters. On the coast of Ecuador (J) they have found grating-boards (?) of baked clay with stones fastened in the clay[1]).

It is of great interest to see that in N.E. Bolivia we only find the most primitive form of manioc grating-boards.

b) Cooking utensils.

The Ashluslay and the Choroti cook their food in simple pots of baked clay. Of the tribes I have visited in my travels, the Chama and Tambopata-Guarayo Indians are the only ones that have no clay vessels. For the rest, very few S. American tribes have no cooking utensils of baked clay. They are the Botocudo and some other Gê's tribes, the tribes of Tierra del Fuego, and now also the Patagonians.

c) Wooden spits.

(See Chapter XIII).

d) Platter, etc.

The (1) Choroti and (2) Ashluslay eat off dishes of baked clay, or off calabash shells. The former, and probably also the latter, have wooden platters as well. The Ashluslay also have large wooden basins.

I have seen wooden bowl (Map 12) among the following tribes in addition to those named: (19) Aymara, (18) Quichua, (5) Chané (4) Chiriguano (6) Mataco, (22) Yuracáre, (23) Churápa and (80) among Indians on the Calilegua, Argentina.

They are also known from the (18) Quichua, Papallacta in Ecuador[2]) (10) Araucanians,[3]) (16) Guató[4]) (49) Araona[5]) (36) Ijca[6]) and the (68) Omagua (?)[7]).

[1]) Joyce, Pl. 6. fig. 2.
[2]) Uhle (1) Vol. 2. Pl. 17. fig. 18—19.
[3]) Latcham (1) p. 342.
[4]) Max Schmidt (3) p. 211.
[5]) Armentia p. 60.
[6]) Bolinder (4) p. 50.
[7]) M. f. V. L. (S. Am. 1350).

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picted from Pachacamac[1]). In my travels I have only seen it among the Mataco.

I am sorry I do not possess in my collections a loom with half-complete fabric with ornamental borders, nor a half-complete band in the Kelim technique. Since the »Arawak» loom is universally found in the Chaco, I think it more likely that the Choroti and Ashluslay originally learned the art of weaving from the Arawaks (Chané) than that it passed on to them from the mountain civilization. It is, however, certain that their weaving industry developed under the influence of the Mountain civilization.

Pottery.

All the tribes I have visited on my journeys possess earthenware vessels made by themselves, except the Cháma and the Tambopata-Guarayo, who are identical with or nearly related to them. PATER SCHMIDT[2]) mentions the following tribes as not having any pottery: — Kayapó, Botokudo, Ona, Yahgan, and Alikuluf. The Tehuelche no longer have any pottery, though they had formerly. With the exception of the last-mentioned it is, therefore, only the lowest tribes who are without pottery. The absence of pottery among the Tehuelche is due to their life being so bound up with that of the horse; fragile earthenware is unsuitable for an equestrian people.

The Chaco tribes here dealt with build up their earthenware vessels in layers out of clay ropes[3]). This method of shaping the vessels I have seen among the following tribes: — Choroti, Mataco, Ashluslay, Chiriguano, Chané, Quichua-Mestizos and Huari; and this is the usual method everywhere in S. America where the pottery is uninfluenced by white civilization. PATER SCHMIDT[4]) mentions this method from several tribes in different parts of S. America. The

[1]) (6), p. 7.
[2]) p. 1024.
[3]) See »Indianerleben», p. 122.
[4]) p. 1057.

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A
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vessels are polished with wooden tools, specially made for this purpose, and sometimes also with the tails of the Tolypeutine armadillo[1]).

The Chaco Indians make earthen vessels of a good many shapes (Fig. 65). Of these they have got one at least from the mountain civilization, viz., the waterpot. (Fig. 45). I have, however, already dealt with this in other connections (See above, page 146).

A good many of the earthen vessels of the Choroti and occasionally of the Ashluslay also are provided with handles (Fig. 65). The distribution of vessels of this kind indicates that the handle is an invention which the Choroti and Ashluslay have obtained from the Indians of the western area of civilization.

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I have found earthenware vessels with handles (Map 30[2]) at Sumaipata in the neighbourhood of Sta Cruz de la Sierra, at Caipipendi in the district of the Chiriguano Indians, at Calegua in N. Argentina, in the excavations on the border of Peru and Bolivia, in the San Francisco valley in N. Argentina, at Incallacta and in the Mizque valley between Cochabamba and Sta. Cruz de la Sierra, in the old dwelling-places on the upper Rio Pilcomayo, and at Covendo on the Rio Beni.

On the other hand handles are wanting on the vessels I found in mounds at Mojos, at Guarayos, and in the ancient dwelling and burial grounds on the Rio Guaporé and the Rio Machupo.

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In the following table we see which of the present-day Indian tribes visited by me have got handles on their earthenware vessels. The table also indicates which of these Indians paint their vessels and which of them employ finger-print ornamentation.

[1]) Tolypeutes conurus.

[2]) The shaded area as well as the numbers on the map show the distribution of the handle in S. America.

2: Nordenskiöld E-5 (1908-1909) 1919
SK6 Choroti SK6
Ashluslay SK5

A
C
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	Number on the map.	possess earthenware vessels	finger print ornamentation.	painted vessels.	handles on vessels.
Ashluslay	(2)	+	—	+[1]	+
Atsahuaca		+	—	—	—
Aymara	(19)	+		+	+
Cavina	(58)	+	—	+	—
Chacobo		+			
Cháma					
Chané	(5)	+	+	+	+
Chimane		+			
Chiriguano	(4)	+	+	+	+
Choroti	(1)	+	—	—	+
Guarayú (Mission)		+	—	—	—
Guarayú (Pauserna)		+	—	—	—
Huanyam		+	—	—	—
Hurri		+	—	—	—
Mataco	(6)	+	+	+[1]	+
Quichua	(18)	+	—	+	+
Siriono		+	—	—	—
Tambopata-Guarayo		—	—	—	—
Tapiete	(3)	+	—	+[1]	+
Toba	(7)	+	—	+[1]	+
Tsirakua		+	—	—	—
Yamiaca		+	—	—	—
Yuracáre	(22)	+	—	+	—

Handles on earthen vessels are found everywhere in N. Argentina in the district of the Diaguita[2]), in the (H) province of Buenos-Aires[3]), in San Juan[4]) and La Rioja[5]), in the (t)

[1]) painted only after burning.

[2]) Ambrosetti, Boman, Lafone Quevedo, Outes and other works.

[3]) Ameghino, Vol. I, p. 203, Pl. 7.

[4]) Debenedetti, (4), p 66, 102, 103 etc.

[5]) Debenedetti (5) Fig. 6 and 7.

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Valle del Rio Chubut[1]), in the (O) Rio Parana[2]), in the (N) upper Rio Parana[3]), in all the old Inca country[4]), also in Ecuador[5]), in S. Chili[6]), in Cundinamarca[7]), and Cauca[8]), and at Sta. Marta in Columbia[9]), on (P) Aruba island[10]) on the (S) island of Trinidad[11]) and at (R) Lago Tacarigua[12]).

Besides the above mentioned tribes we find, among present-day Indians earthen vessels provided with handles among the tribes of (48) N. W. Brazil[13]), the (54) Guahibo[14]), the Köggaba[15]) Motilones[16]) Goajiro[17]), the Arawaks[18]) on the coast of Guiana, the Araucanians[19]) and the (8) Lengua[20]).

In addition there are some tribes who have quite lost their primary civilization, e. g. the Mojo. The pottery in the archeological excavations at Mojos is, as already mentioned, without handles.

When ornamenting their earthen vessels the Choroti and Ashluslay never paint them before burning, but the latter sometimes do so afterwards. On some vessels there is plain

1) Outes y Bruch (5), fig. 115.
2) Torres (2), p. 88.
3) Mayntzhusen, p. 466. (rare).
4) Uhle, Seler, Reiss u. Stübel and other works.
5) Uhle, do.
6) Photo. G. M.
7) Uhle (1), Pl.
8) Uhle (1), Pl.
9) G. M. Bolinder's collection.
10) Josselin de Jong, Pl. 11, 13, 14 15, etc.
11) De Booy, Plate 5 a.
12) Marcano, p. 55. Pl. 12, Fig. 39. p. 57, Pl. 13. (Handle small and rare).
13) Koch-Grünberg (2), Vol. 2, p. 224.
14) Stradelli, p. 31.
15) Bolinder (4), p. 130.
16) Bolinder (3), p. 39.
17) Candelier, p. 267.
18) Ten Kate, p. 107 »Waar men aan kruiken, kommen enz. hengsels of ooren vindt, moet men aan Europeesch namaaksel denken.«
19) Latcham (1), p. 310.
20) Grubb, Pl. p. 74.

[Text continues on p. 217]

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ornamention executed by means of the wooden tools used for polishing. Among the Choroti and Ashluslay I have seen no clear finger-print ornamentation. On the other hand this is not uncommon among the Mataco-Vejos, the Mataco who dwell in immediate contact with the Chané, who often embellish their pottery with such ornaments.

On the Choroti vessels and still more frequently on those of the Mataco the clay-coils themselves are sometimes retained as ornaments.

The distribution of finger-print ornamention (Map 40 Fig. 66) differs altogether from that of the handle. While the handle is an element of civilization which evidently came to the Chaco from the mountain civilization, finger-print ornamentation came from the east, probably from the Guarani Indians.

I have indicated in the table the tribes among whom I have seen this kind of ornamentation. In my archaeological excavations I have found[1]) such ornamentation at (ö) Tarupayu near the upper Rio Pilcomayo, at (o) Incahuasi between the Rio Parapiti and the Rio Grande in S. Bolivia, and in the province of (e) Sara not far from Sta. Cruz de la Sierra.

AMEGHINO[2]) mentions this ornamentation from the province of (H) Buenos-Aires, OUTES[3]) from (p) San Blas, not far from Bahia Blanca in Argentina.

MEYER[4]) from (q) Laguna in Sta. Catharina in S. Brazil, TORRES[5]) from (r) Entre Rios, KUNERT[6]) from (S) Rio Grande do Sul (Region de Cahy and Forromecco), and GRUBB[7]) from (f) the country of the Lengua Indians.

[1]) NORDENSKIÖLD (10), Figs 19—22.

[2]) Vol. I Pages 280—291, Pl. 6.

[3]) (4), p. 207, fig. 35.

[4]) P. 340.

[5]) (1), fig. 3.

[6]) P. 33.

[7]) GRUBB, p. 73. »Broken pieces of old pottery have been found bearing scorings, as if made by the pressure of the thumb, and are said to be the work of spirits.«

2: Nordenskiöld E-5 (1908-1909)1919
SK6 Choroti SK6
Ashluslay SK5

Ornamentation of this kind is found, too, on earthen vessels from (N) Alto Paraná[1]), the vicinity of Bompland, Missiones in N. Argentina[2]). KISSENBERTH'S[3]) discovery of this form of ornamentation on potsherds which he found near the Dominican mission (g) of Conceiçao do Araguaya is extremely interesting. They are probably relics of the migration of the Tapirapé Indians. These Indians are Guarani and were possibly driven from the coast to their present district owing to the slave raids of the Portuguese.

Occasionally pottery is found in other parts of S. America sporadically with fingerprint ornamentation on the rim of the vessel. Typical finger-print ornamentation, however, is only found in the parts indicated on the map.

The Ashluslay do not paint their pottery before but after burning. This may be due to their not having in their country the colouring materials requisite for painting before burning. I have not got painted pottery from the Choroti.

For colouring, the (2) Ashluslay use the resin of a tree, «palo santo».[4]) Besides these Indians and other nearly related Chaco tribes, the (7) Toba, (3) Tapiete, (8) Lengua[5]), (12) Mbayá[6]) and (11) Chamacoco[7]), I have only seen the (5) Chané use similar resin for the painting of their pottery, which painting, however, is done before burning. The latter sometimes resin the rim of a vessel after the burning, while it is still warm. There are very considerable areas of S. America where the art of painting pottery has not been understood, and is not understood to-day. In the first place the art was known to the tribes on the Andes (the shaded area on the map) as well as the Guarani tribes and the major-

[1]) KUNIKE, p. 158, fig. 96.
[2]) G. M. BACKMAN'S collection.
[3]) (2), p. 77, fig. 26.
[4]) Bulnesia Sarmienti.
[5]) GRUBB, p. 73.
[6]) COLINI, p. 314.
[7]) K. v. d STEINEN (4), p. 325.